

GENERAL NOTES:

1. THIS PRODUCT HAS BEEN TESTED, ANALYZED & APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE "ALLOWABLE DESIGN PRESSURE TABLE(S)".
2. OPENINGS, BUCKING & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE.
3. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & SHALL NOT VARY UNLESS SPECIFICALLY MENTIONED ON THE DRAWINGS. SPECIFIED ANCHOR EMBED TO BASE MATERIAL SHALL BE BEYOND WALL FINISH OR STUCCO.
4. THIS PRODUCT HAS BEEN DESIGNED IN ACCORDANCE WITH AND MEETS THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (FBC) INCLUDING HIGH VELOCITY HURRICANE ZONES (HNHZ) & IS LARGE MISSILE IMPACT RATED.
5. IMPACT SHUTTERS ARE NOT REQUIRED WITH THIS PRODUCT.
6. ALL ANCHORS SECURING PRODUCT FRAMES TO PRESSURE TREATED BUCKS OR WOOD FRAMING SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE PRESSURE TREATING CHEMICALS IN THE WOOD.
7. DETERMINE THE POSITIVE & NEGATIVE DESIGN LOADS TO USE WHEN REFERENCING THESE DOCUMENTS IN ACCORDANCE WITH THE GOVERNING CODE AND GOVERNING WIND VELOCITY. FOR WIND LOAD CALCULATIONS IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, A DIRECTIONALITY FACTOR OF $K_d = 0.85$ MAY BE APPLIED PER THE ASCE-7 STANDARD.
8. MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF FLORIDA BUILDING CODE.
9. TO THE BEST OF OUR KNOWLEDGE, THE PRODUCT SHOWN HEREIN IS QUALITY ASSURED BY A FLORIDA STATE APPROVED CERTIFICATION/QA ENTITY & SHALL BE LABELED IN ACCORDANCE WITH THE FBC AND THE FLORIDA DEPARTMENT OF BUSINESS & PROFESSIONAL REGULATION SPECIFICATIONS. THESE DRAWINGS SHOW ALL APPLICABLE ELEVATION, COMBINATION, INSTALLATION & COMPENSATIVE ANALYSIS CONDITIONS AS DETERMINED THROUGH TESTING & ENGINEERING RATIONAL ANALYSIS. PRODUCT ASSEMBLY SHALL BE IN ACCORDANCE WITH THESE DRAWINGS, THE MANUFACTURER'S QUALITY ASSURANCE SPECIFICATIONS & TESTING REPORTS.
10. CERTIFICATION OF THIS PRODUCT SHALL BE CONSIDERED VOID IF IT IS INSTALLED WITHOUT A BUILDING PERMIT FROM THE APPLICABLE LOCAL BUILDING DEPARTMENT OR IF IT IS INSTALLED BY ANYONE OTHER THAN A LICENSED CONTRACTOR EXPERIENCED WITH INSTALLATIONS OF THIS TYPE OF PRODUCT.

EVALUATION OF THIS PRODUCT IS BASED ON APPLICABLE STANDARDS AND/OR INFORMATION & RESULTS FROM APPLICABLE TEST REPORTS. THE FLORIDA BUILDING CODE VERSION CONSIDERED WITH THIS EVALUATION WAS THAT IN FORCE AT THE TIME OF THE EVALUATION. IN THE EVENT OF CODE VERSION CHANGES/UPDATES OR IN THE EVENT THAT NEW OR ADDITIONAL TESTING IS COMPLETED ON THIS PRODUCT, PRIOR TO STATING CODE COMPLIANCE WITH THE STATE, THE MANUFACTURER SHALL CONFIRM WITH THE EVALUATION ENGINEER OF RECORD THAT EVERYTHING SPECIFIED HERE-IN IS CURRENT WITH ALL CURRENT TESTING, CODES AND APPLICABLE STANDARDS.

CORNER CONSTRUCTION:

FRAME & SASH: MITER CUT, BUTTED AND FULLY WELDED
INTERMEDIATE RAIL ENDS: SQUARE CUT, BUTTED AND FULLY WELDED TO SIDES

INSTALLATION NOTE:

WHEN NECESSARY, INSTALLATION METHODS MAY BE MIXED WITH ANY ONE WINDOW SUCH THAT INDIVIDUAL SIDES OF THE WINDOW MAY USE ONE OR THE OTHER ANCHOR METHOD (EXAMPLE: SILL MAY USE FRAME SCREWS METHOD WHILE OTHER SIDES USE CLIP)

ANCHOR/SUBSTRATE EVALUATION NOTE:

ALL ANCHORS IN THEIR SPECIFIED SUBSTRATES HAVE BEEN ANALYZED IN ACCORDANCE WITH THEIR APPLICABLE STANDARD(S) AND ARE FOUND TO BE CAPABLE OF SUPPORTING ALL LOADS IMPOSED ON THEM UNDER THE GUIDELINES OF THIS DOCUMENT. ANY SUBSTRATES OR CONDITIONS OUTSIDE OF WHAT IS SHOWN HERE-IN SHALL BE SUBJECT TO JOB SPECIFIC ENGINEER'S REVIEW & CERTIFICATION.

FRAME ANCHOR REQUIREMENTS TABLE

OPENING TYPE (SUBSTRATE)	FRAME/CLIP TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
FRAME SCREWS			
MIN. 2X4 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 14 SMS OR WOOD SCREW	1 1/4"	3/4"
MIN. 16 GA. 50 KSI METAL STUD	1/4-20 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	1/4-20 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	1/4-20 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. C-90 CMU	(1) 1/4" CONCRETE SCREW	1 1/4"	2"
MIN. 2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 1/2"	2"

INSTALLATION CLIP SCREWS

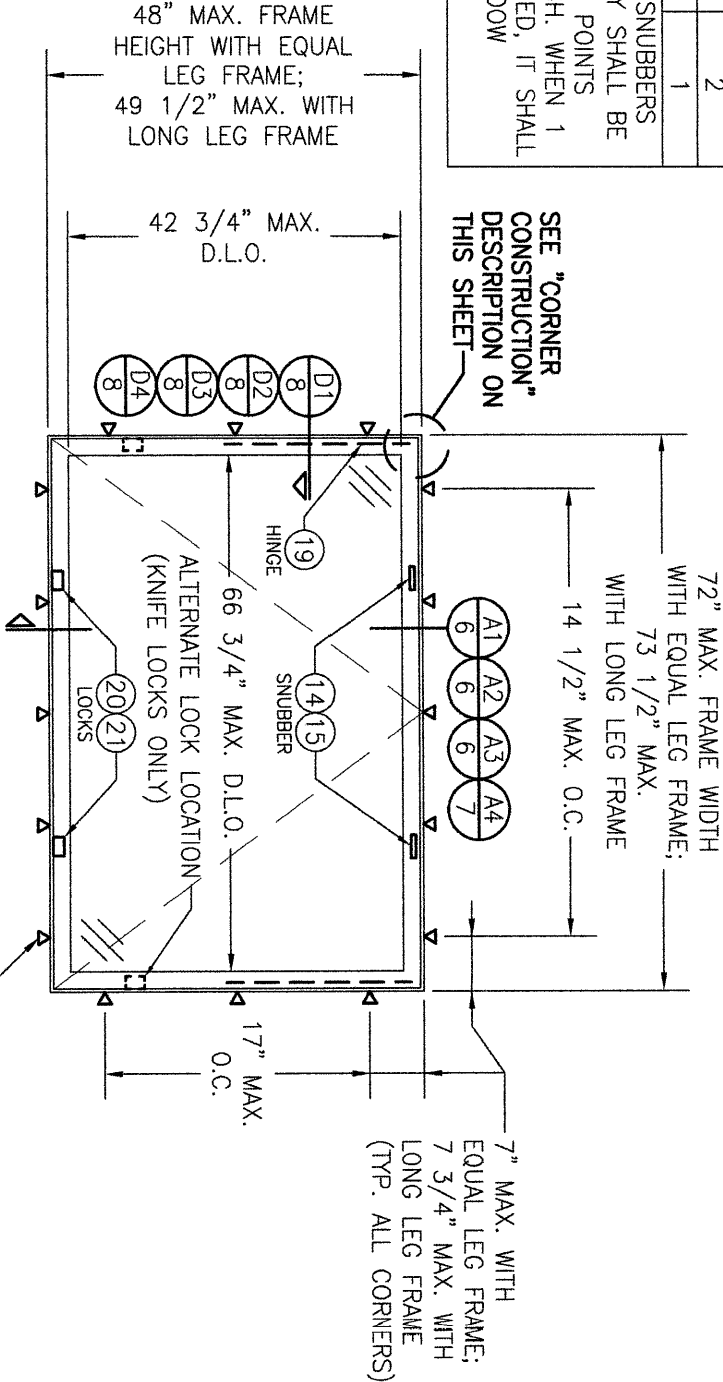
(2) MIN. 2X6 WOOD FRAME OR BUCK (MIN. GR. 3 & G=0.55)	NO. 14 SMS SCREW	1 3/8"	3/4"
MIN. 16 GA. 50 KSI METAL STUD	NO. 14 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK A36 STEEL	1/4-20 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 1/8" THK 6063-T5 ALUM.	1/4-20 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. C-90 CMU	(1) 1/4" CONCRETE SCREW	1 1/4"	2"
MIN. 2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 1/2"	2"

- (1) CONCRETE SCREWS SHALL BE ELCO ULTRACONS (C.S.), ELCO CRETE-FLEX (S.S.), ITW RAMSET/RED HEAD TAPCONS (C.S. OR S.S.) OR HILTI KWIK-CON II (C.S OR S.S.).
- (2) 2X6 BUCKS MAY BE RIPPED DOWN TO AS LITTLE AS 4" PROVIDING THE REQUIRED SCREW EDGE DISTANCE IS HELD & THE BUCK EXTENDS TO WITHIN 3/16" OF THE EXTERIOR EDGE OF THE WINDOW FRAME.

SNUBBER REQUIREMENTS

FRAME WIDTH	QUANTITY PER PANEL
OVER 36"	2
36" OR LESS	1

NOTE: WHEN 2 SNUBBERS ARE USED, THEY SHALL BE PLACED AT 1/4 POINTS ALONG THE SASH. WHEN 1 SNUBBER IS USED, IT SHALL BE AT THE WINDOW CENTERLINE.



EXTERIOR ELEVATION:
SINGLE PROJECT-OUT WINDOW

SCALE: 1/2" = 1'-0"

ALLOWABLE DESIGN PRESSURE
(SINGLE WINDOWS & MULTIPLE WINDOWS
WITHIN ONE FRAME)
+/-65 PSF

LOCK REQUIREMENTS

CAM LOCKS

- * 2 LOCKS REQUIRED PER WINDOW.
- * CAM LOCKS ARE APPLICABLE FOR PLACEMENT AT THE SILL ONLY (MAY NOT BE PLACED AT THE SIDES).
- * DISTANCE BETWEEN LOCKS SHALL NOT EXCEED 34", DISTANCE FROM SASH OUTER CORNERS TO CENTER OF LOCKS SHALL NOT EXCEED 18 9/16" & LOCK POSITIONS SHALL BE APPROXIMATELY AT QUARTER POINTS ALONG THE SILL.

KNIFE LOCKS

- * 2 LOCKS REQUIRED PER WINDOW.
- * KNIFE LOCKS ARE APPLICABLE FOR PLACEMENT AT THE SIDES OR SILL.
- * WHEN PLACED AT THE SILL, DISTANCE BETWEEN LOCKS SHALL NOT EXCEED 34", DISTANCE FROM SASH OUTER CORNERS TO CENTER OF LOCKS SHALL NOT EXCEED 18 9/16" & LOCK POSITIONS SHALL BE APPROXIMATELY AT QUARTER POINTS ALONG SILL.
- * WHEN PLACED AT SIDES, DISTANCE FROM OUTER BOTTOM CORNER OF SASH TO THE CENTER OF LOCK SHALL NOT EXCEED 10 1/4" & WILL VARY WITH WINDOW HEIGHT.

THESE DRAWINGS ARE APPLICABLE ONLY TO THE PRODUCT SPECIFIED. THEY MAY NOT BE USED FOR THE ASSEMBLY AND/OR INSTALLATION OF ANY OTHER PRODUCT NOR MAY THEY BE USED FOR RATIONAL AND/OR LOCAL APPROVAL OF ANY PRODUCT NOT PRODUCED BY THE MANUFACTURER STATED ON THESE DRAWINGS.

NO.	REVISION DESCRIPTION	BY	DATE
A1	UPDATE TO CURRENT STANDARDS	W.R.M.	08/17/11
B1	ADD ALTERNATE GLAZING BEAD	W.R.M.	10/01/13
C1	UPDATE TO CURRENT STANDARDS	W.W.S.	12/10/14
D1	MINOR TYPO CORRECTION	W.W.S.	06/10/20
E1	UPDATE PART PROFILES	W.W.S.	01/31/23
F1	INCREASE SHIM SPACE	W.W.S.	09/04/24

MANUFACTURER

HOPE'S WINDOWS, INC.
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JAMESTOWN, NY 14702
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DRAWING TITLE

JAMESTOWN 175 STEEL SERIES IMPACT PROJECT-OUT WINDOW

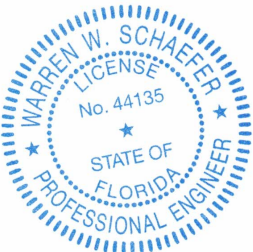
CONSULTANTS

W. W. SCHAEFER ENGINEERING
& CONSULTING, P.A.

25601 AYSEN DRIVE
PUNTA GORDA, FL 33983
PHONE: 561-744-3424

CERTIFICATION

WARREN W. SCHAEFER, P.E.
P.E. NO. 44135



Digitally
signed by
Warren W
Schaefer

Date:

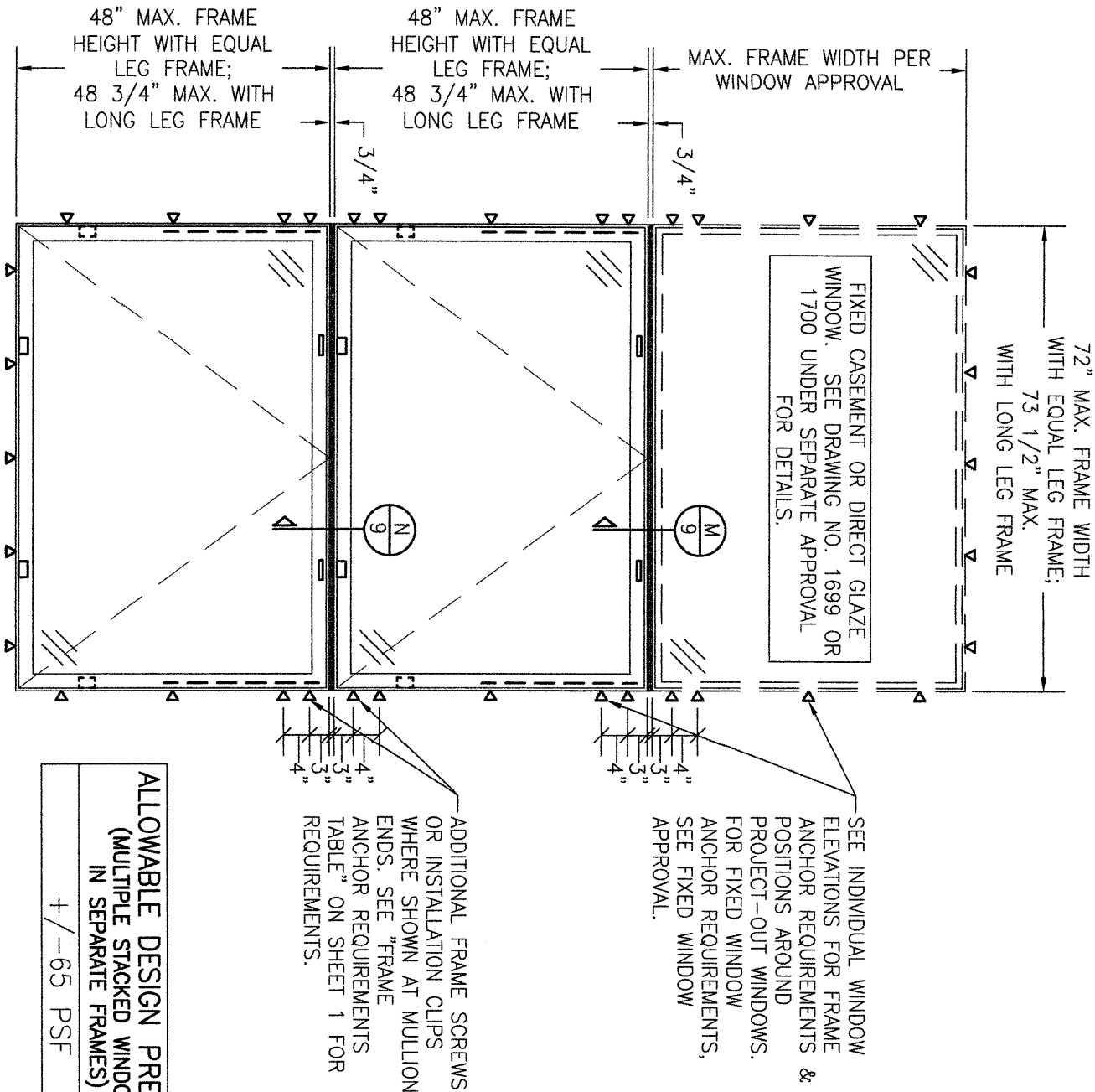
2024.09.05

08:09:17 -04'00'

DRAWING NO.:
1738

REV.:
F

SHEET NO.:
1 OF 11



EXTERIOR ELEVATION:

**MULTIPLE STACKED PROJECT-OUT/FIXED
WINDOWS IN SEPARATE FRAMES**

SCALE: 1/2" = 1'-0"

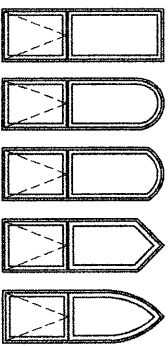
MULTIPLE UNIT NOTES:

1. FOR ALL DETAIL NOT SHOWN, SEE INDIVIDUAL WINDOW ELEVATIONS.
2. THERE IS NO LIMIT ON THE NUMBER OF WINDOWS THAT MAY BE COMBINED VERTICALLY INTO ONE OPENING PROVIDING THE OPENING IS DESIGNED TO SUPPORT ALL LOADS TRANSFERRED FROM THE WINDOWS & THEIR MULLIONS.
3. ANY COMBINATION OF FIXED/OPERABLE WINDOWS IN ONE OPENING SHALL APPLY.
4. FIXED WINDOWS MAY BE RECTANGULAR OR SHAPED PER THEIR APPROVAL PROVIDING THE MULLION CONDITIONS ARE AS SPECIFIED IN THIS ELEVATION.

**ALLOWABLE DESIGN PRESSURE
(MULTIPLE STACKED WINDOWS
IN SEPARATE FRAMES)**

+ / - 65 PSF

APPROVED SHAPES



NOTES:

1. OTHER SHAPES MAY APPLY PROVIDING THEY ARE SIMILAR TO THOSE SHOWN & HAVE CORNER CONSTRUCTION AS DESCRIBED IN THIS DRAWING.
2. ALL SHAPED UNITS MUST FIT INSCRIBED INTO THE ALLOWABLE RECTANGULAR UNITS & BE GOVERNED BY THE ALLOWABLE PRESSURE OF THE RESPECTIVE RECTANGULAR UNIT.

NO.	REVISION	DESCRIPTION	BY	DATE

DRAWN BY: W.R.M.	CHECKED BY: W.M.S.
PLOT: 1=24	DATE: 02/01/11

MANUFACTURER

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CERTIFICATION

WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

DRAWING NO. REV.

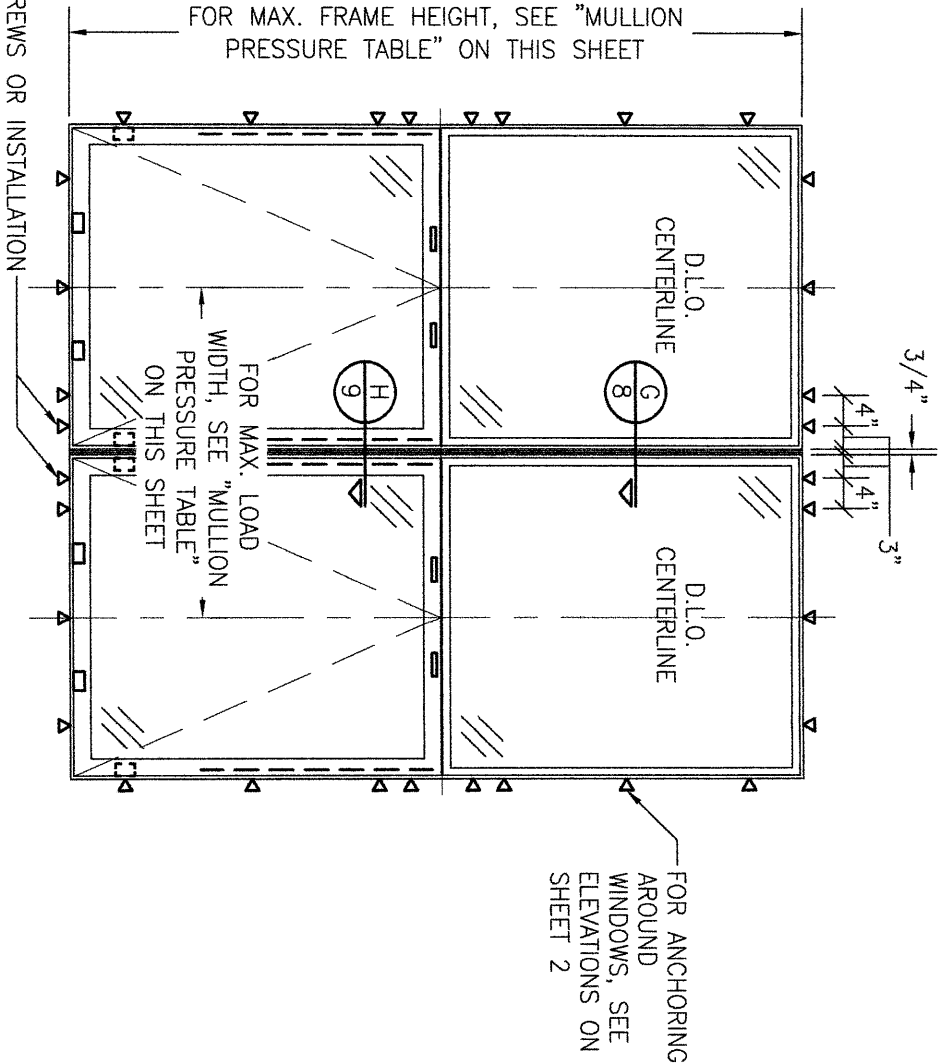
1738 F

SHEET NO.

3 OF 11

MULTIPLE UNIT NOTES:

- 1. FOR ALL DETAIL NOT SHOWN, SEE INDIVIDUAL WINDOW ELEVATIONS.
- 2. THERE IS NO LIMIT ON THE NUMBER OF WINDOW UNITS THAT MAY BE MULLED HORIZONTALLY INTO ONE OPENING PROVIDING THE OPENING IS DESIGNED TO SUPPORT ALL LOADS TRANSFERRED FROM THE WINDOWS & THEIR MULLIONS.
- 3. WINDOW UNITS ON EITHER SIDE OF THE MULLION MAY BE ANY COMBINATION OF FIXED/PROJECT IN ONE FRAME PER INDIVIDUAL UNIT ELEVATIONS.
- 4. SHAPED TOP WINDOWS ALSO APPLY TO SIDE MULLING (WHEN APPLICABLE) UNDER THE SAME RESTRICTIONS SHOWN IN THIS ELEVATION.



ADDITIONAL FRAME SCREWS OR INSTALLATION CLIPS WHERE SHOWN AT MULLION ENDS. SEE "FRAME ANCHOR REQUIREMENTS TABLE" ON SHEET 1 FOR REQUIREMENTS.

EXTERIOR ELEVATION:

FIXED OVER PROJECT-OUT MULLED TO FIXED OVER PROJECT-OUT WINDOW

SCALE: 1/2" = 1'-0"

(FOR DETAIL OF WINDOWS NOT SHOWN, SEE ELEVATIONS ON SHEET 2)

MULLION DESIGN PRESSURE TABLE				
EQUAL LEG FRAME	LONG LEG FRAME	MAXIMUM LOAD WIDTH (IN.)	ALLOWABLE PRESSURE	
			POSITIVE (1) (PSF)	NEGATIVE (PSF)
95 1/4	96 3/4	72 3/4	38.2	38.2
		66 3/4	41.6	41.6
		60 3/4	45.7	45.7
		54 3/4	50.8	50.8
		48 3/4	57.0	57.0
89 1/4	90 3/4	42 3/4	65.0	65.0
		72 3/4	40.7	40.7
		66 3/4	44.4	44.4
		60 3/4	48.8	48.8
		54 3/4	54.1	54.1
83 1/4	84 3/4	48 3/4	60.8	60.8
		44 3/4	65.0	65.0
		72 3/4	43.7	43.7
		66 3/4	47.6	47.6
		60 3/4	52.3	52.3
77 1/4	78 3/4	54 3/4	58.0	58.0
		48 3/4	65.0	65.0
		72 3/4	47.0	47.0
		66 3/4	51.2	51.2
		60 3/4	56.3	56.3
71 1/4	72 3/4	54 3/4	62.5	62.5
		51 3/4	65.0	65.0
		72 3/4	50.9	50.9
		66 3/4	55.5	55.5
		60 3/4	61.0	61.0
65 1/4	66 3/4	56 3/4	65.0	65.0
		72 3/4	55.6	55.6
		66 3/4	60.6	60.6
		61 3/4	65.0	65.0
		72 3/4	61.1	61.1
59 1/4	60 3/4	67 3/4	65.0	65.0
		72 3/4	65.0	65.0
53 1/4	54 3/4	72 3/4	65.0	65.0

NOTES:
1. LOAD WIDTH IS THE DISTANCE BETWEEN WINDOW D.L.O. CENTERLINES.
2. ALLOWABLE UNIT PRESSURE SHALL BE THE LESSER OF THE PRESSURES SHOWN IN THIS TABLE & THOSE SPECIFIED FOR THE INDIVIDUAL WINDOW.
3. SIZE VALUES IN TABLE ARE +/- 1/4"

DRAWING TITLE
JAMESTOWN 175 STEEL SERIES IMPACT PROJECT-OUT WINDOW

CONSULTANTS
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CERTIFICATION
WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

DRAWING NO. 1738
SHEET NO. 4 OF 11

REV. F

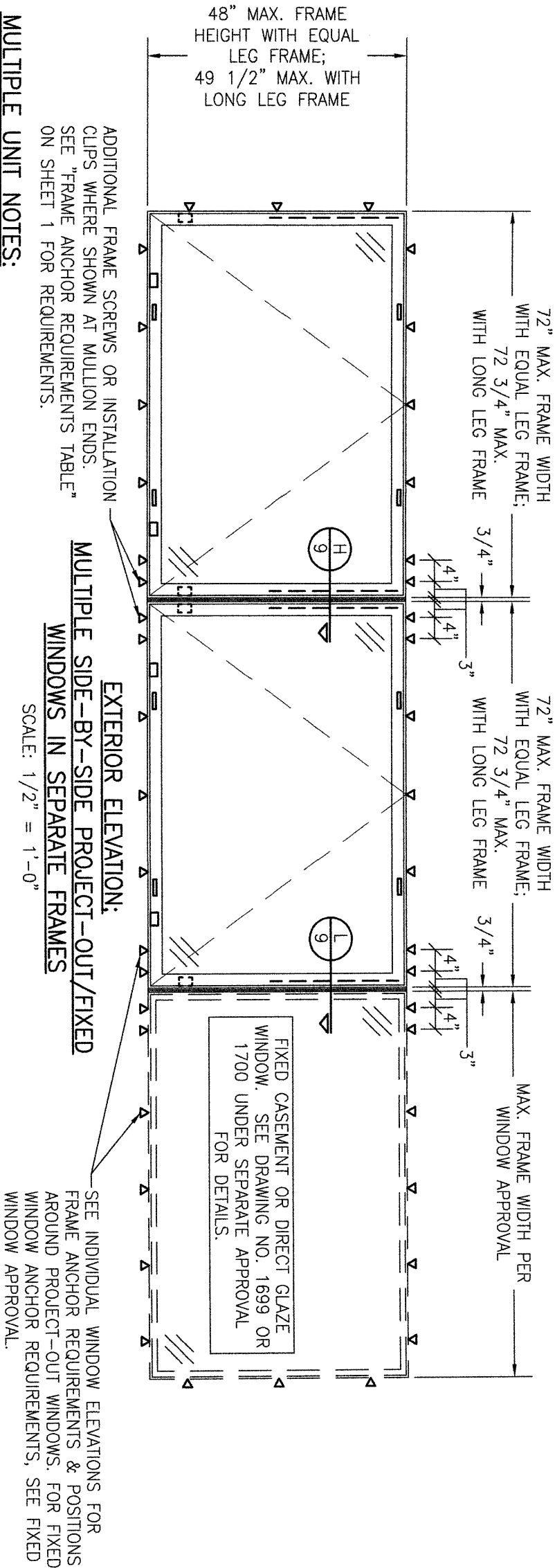
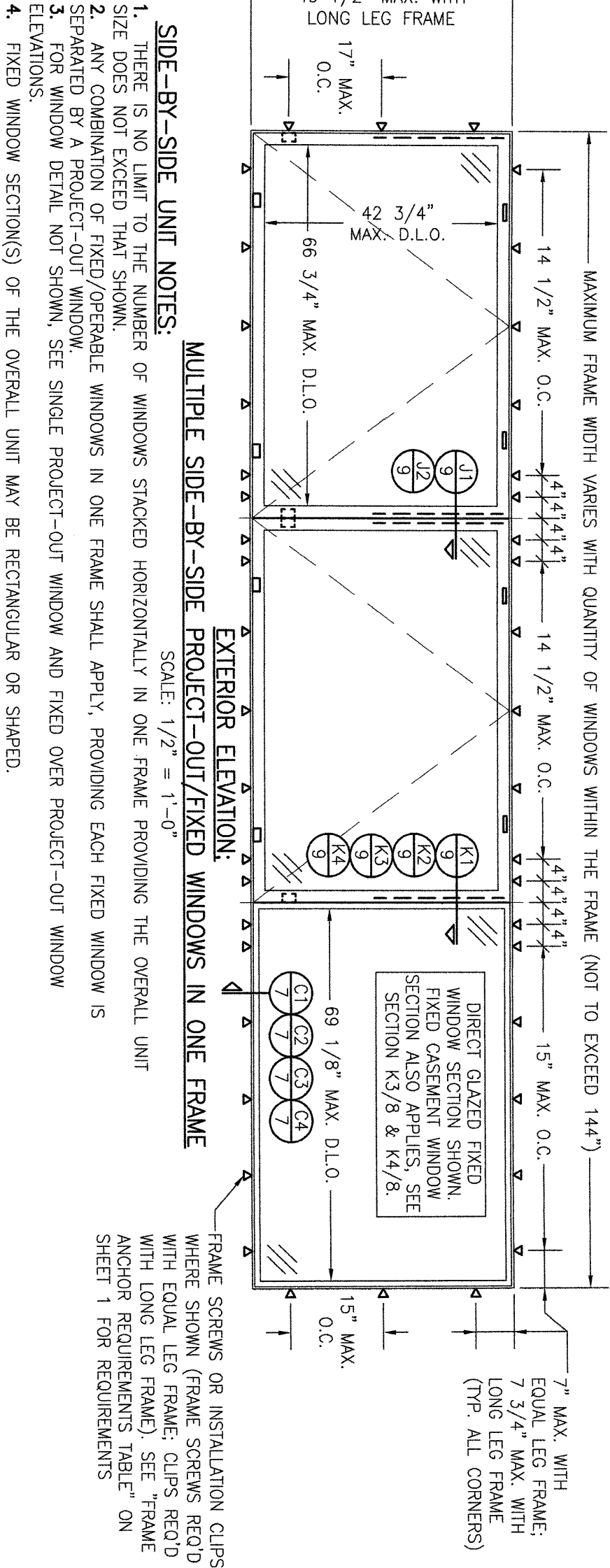
NO. REVISION DESCRIPTION

BY

DATE

DRAWN BY: W.R.M.
PLOT: 1=24

CHECKED BY: W.R.M.
DATE: 02/01/11



ALLOWABLE DESIGN PRESSURE
(MULTIPLE SIDE-BY-SIDE WINDOWS
IN SEPARATE FRAMES)

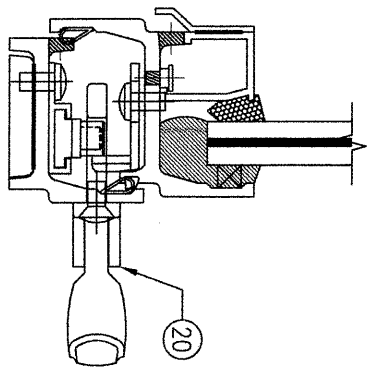
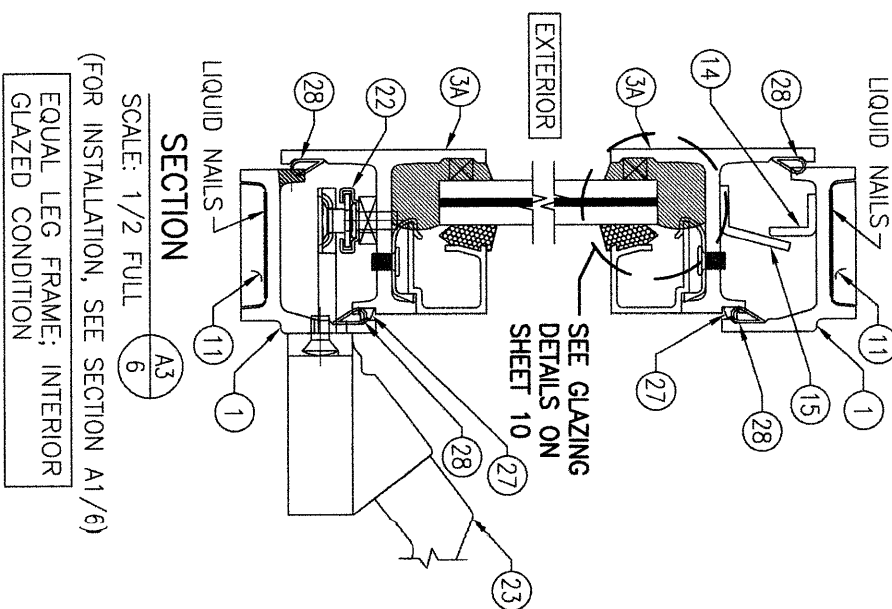
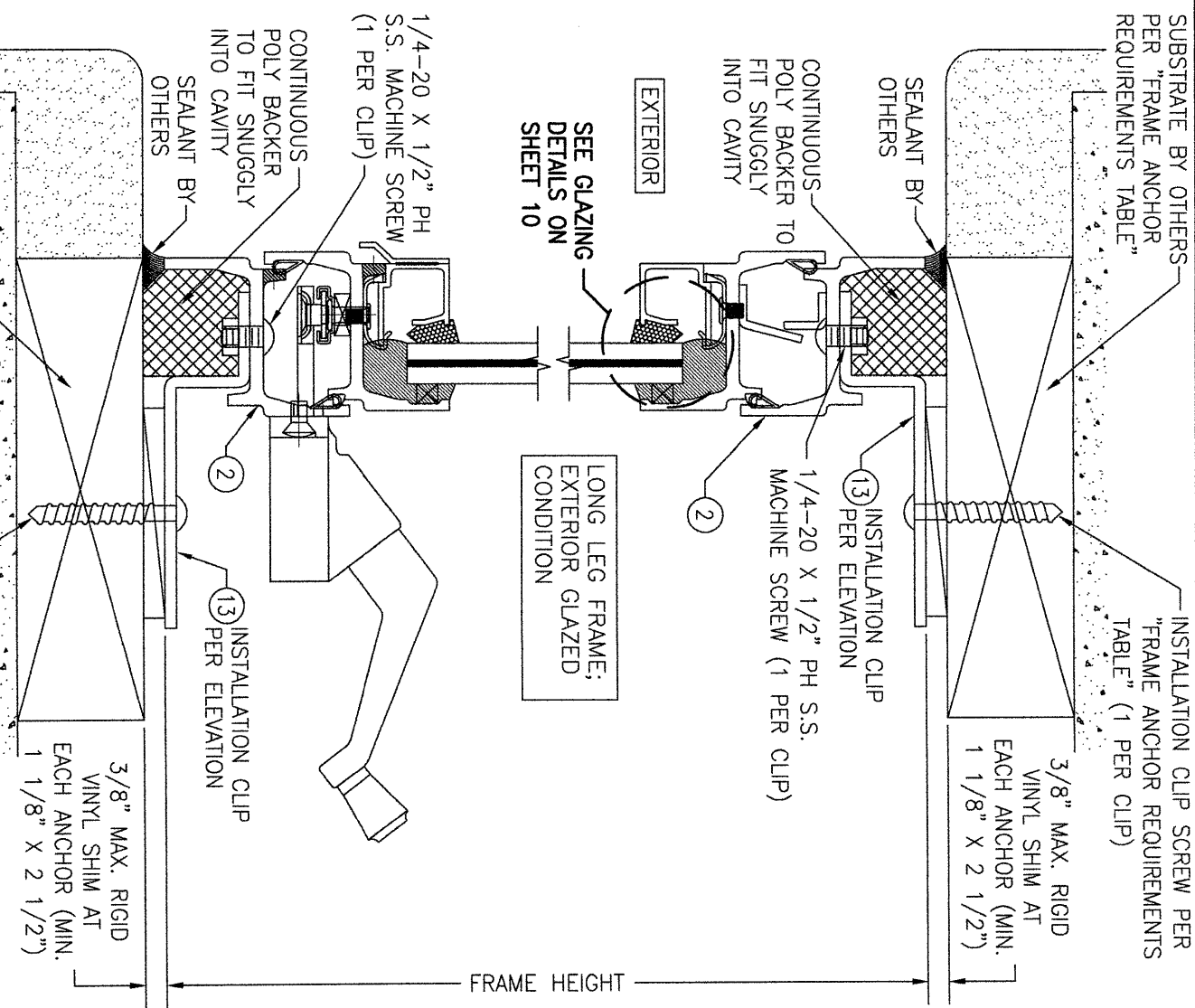
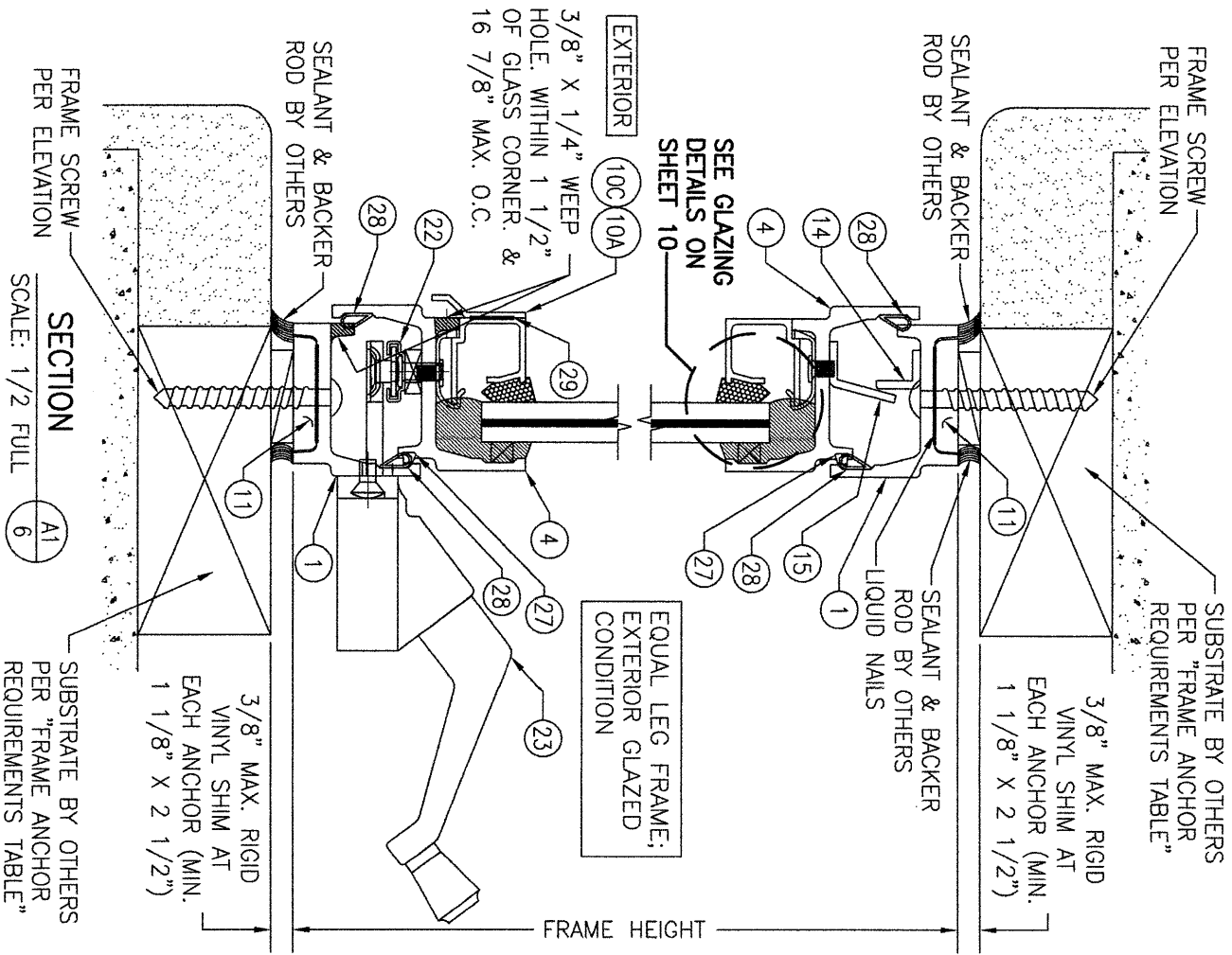
+/-65 PSF

NO.	REVISION	DESCRIPTION	BY	DATE

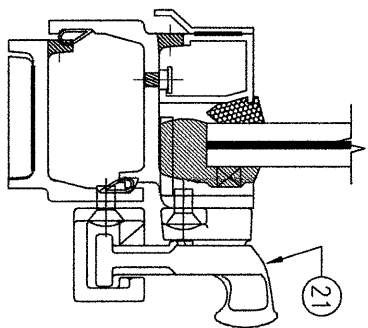
DRAWING TITLE JAMESTOWN 175 STEEL SERIES IMPACT PROJECT-OUT WINDOW	CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 25601 AYSEN DRIVE PUNTA GORDA, FL 33983 PHONE: 561-744-3424	MANUFACTURER HOPE'S WINDOWS, INC. 84 HOPKINS AVENUE JAMESTOWN, NY 14702 (716) 665-5124
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CERTIFICATION WARREN W. SCHAEFER, P.E. P.E. NO. 44135

DRAWING NO. 1738 SHEET NO. 5 OF 11	REV. F
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SILL DETAIL SHOWING
KNIFE LOCK



SILL DETAIL SHOWING
CAM LOCK

INSTALLATION SEALANT NOTE
FRAME TO OPENING & MULLION
SEALANTS ARE NOT PART OF THIS
CERTIFICATION & ARE THE
RESPONSIBILITY OF THE WINDOW
INSTALLER.

SECTION A2
SCALE: 1/2 FULL
"FRAME ANCHOR REQUIREMENTS
TABLE" (1 PER CLIP)
(FOR DETAIL NOT SHOWN, SEE SECTION A1/6)

SECTION A3
SCALE: 1/2 FULL
(FOR INSTALLATION, SEE SECTION A1/6)
EQUAL LEG FRAME; INTERIOR
GLAZED CONDITION

NO.	REVISION	DESCRIPTION	BY	DATE
1	1=2			
2				
3				
4				
5				
6				
7				
8				
9				
10				

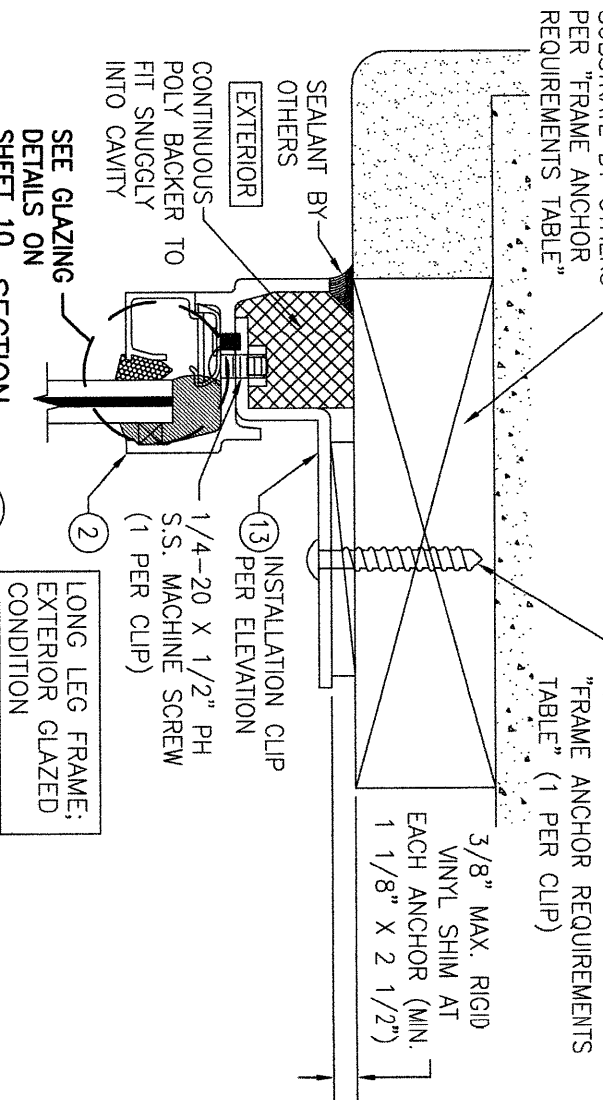
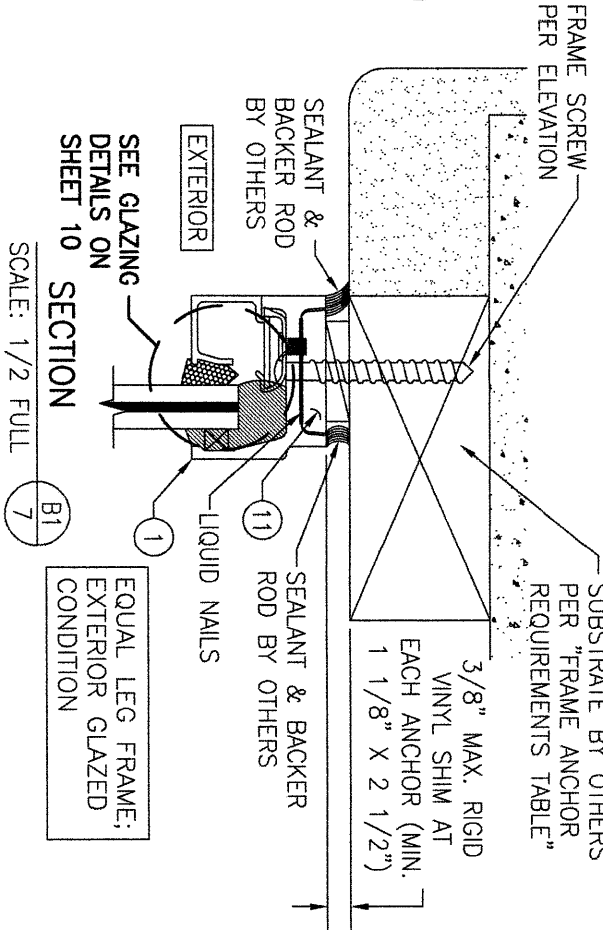
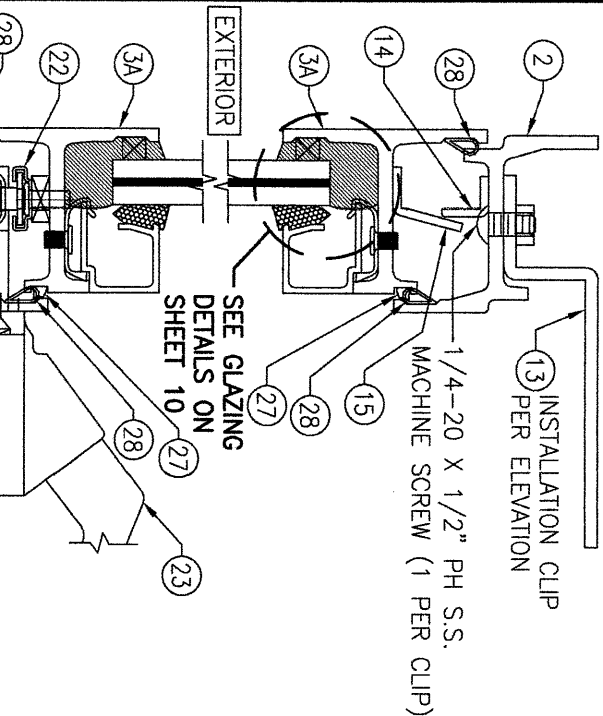
DRAWING TITLE
JAMESTOWN 175 STEEL SERIES IMPACT PROJECT-OUT WINDOW

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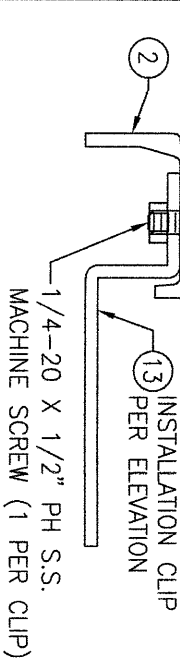
CERTIFICATION
WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

DRAWING NO. 1738
SHEET NO. 6 OF 11



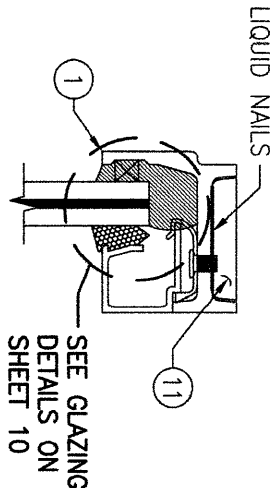
SECTION B2
SCALE: 1/2 FULL

LONG LEG FRAME;
EXTERIOR GLAZED
CONDITION



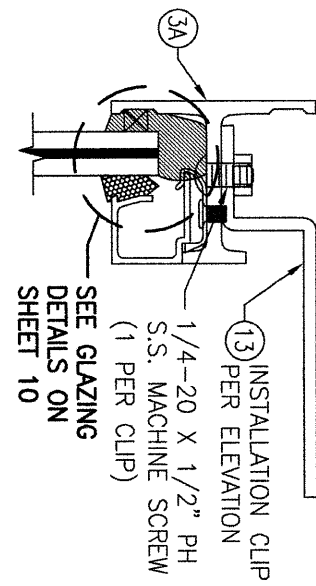
SECTION A4
SCALE: 1/2 FULL

LONG LEG FRAME;
INTERIOR GLAZED
CONDITION



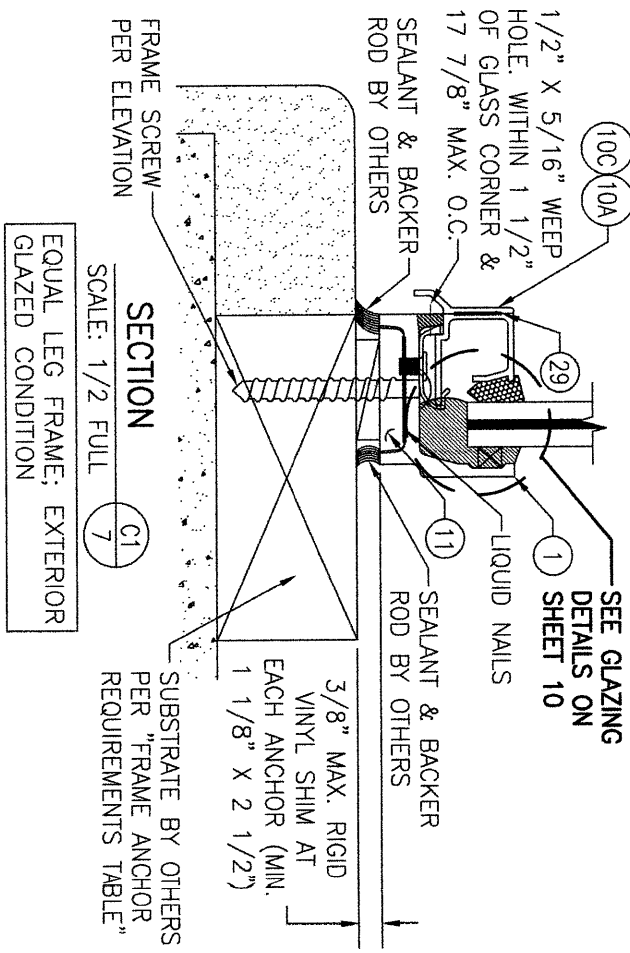
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SCALE: 1/2 FULL

EQUAL LEG FRAME;
INTERIOR GLAZED
CONDITION



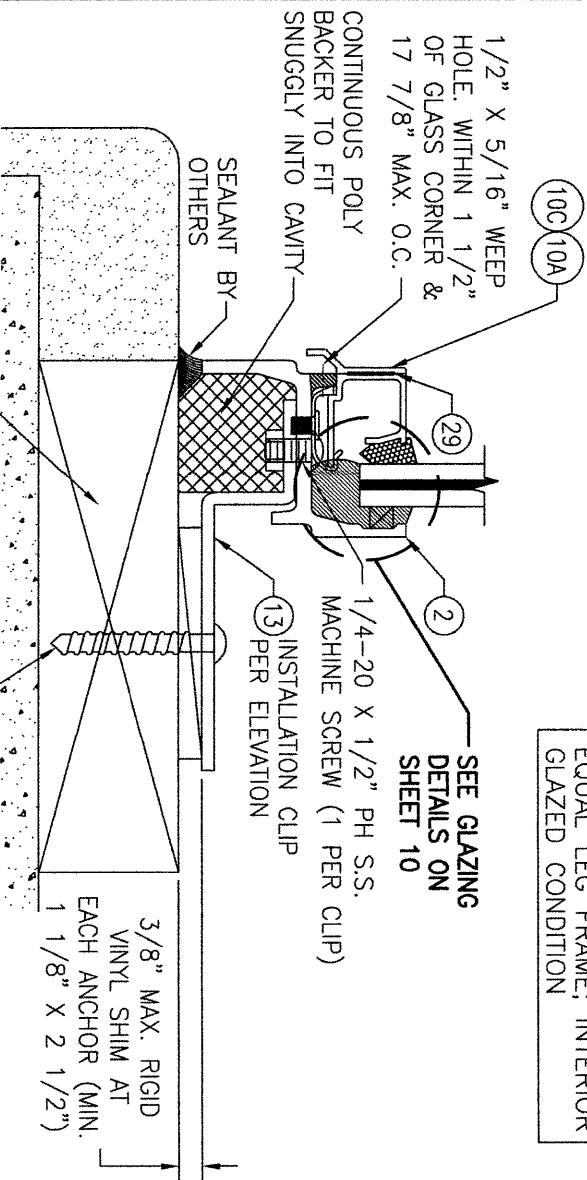
SECTION B4
SCALE: 1/2 FULL

LONG LEG FRAME;
INTERIOR GLAZED
CONDITION



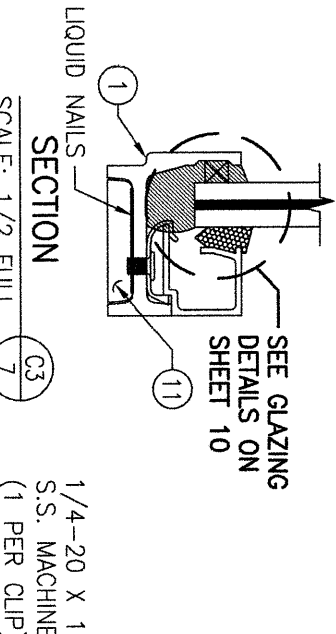
SECTION C1
SCALE: 1/2 FULL

EQUAL LEG FRAME;
EXTERIOR GLAZED
CONDITION



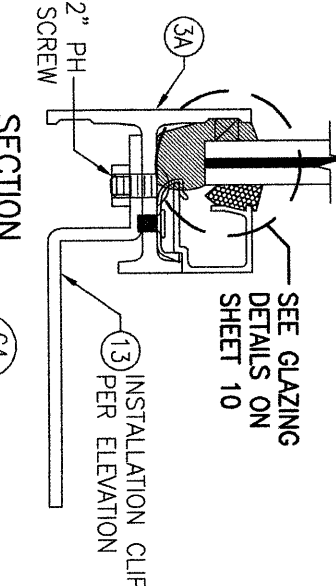
SECTION C2
SCALE: 1/2 FULL

LONG LEG FRAME;
EXTERIOR GLAZED
CONDITION



SECTION C3
SCALE: 1/2 FULL

EQUAL LEG FRAME;
INTERIOR GLAZED
CONDITION



SECTION C4
SCALE: 1/2 FULL

LONG LEG FRAME;
INTERIOR GLAZED
CONDITION

NO.	REVISION	DESCRIPTION	BY	DATE
1	2			

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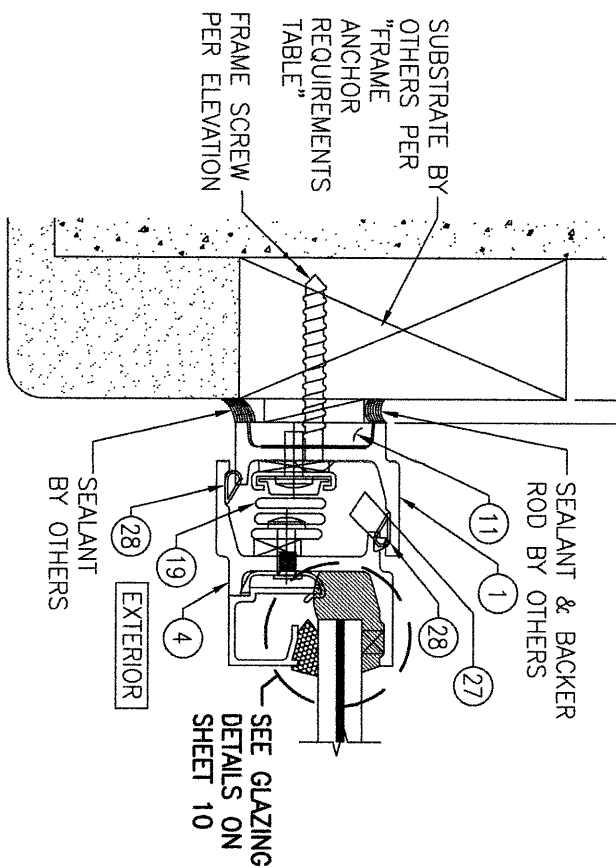
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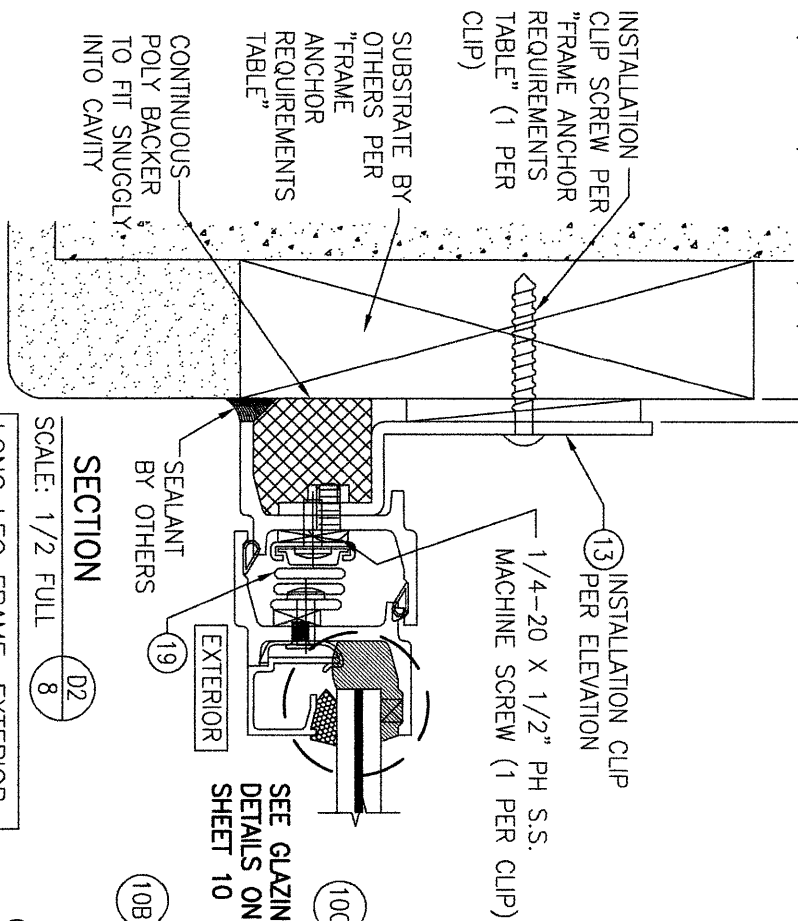
DRAWING NO. 1738
SHEET NO. 7 OF 11

3/8" MAX. RIGID VINYL SHIM
AT EA. ANCHOR
(MIN. 1 1/8" X 2 1/2")

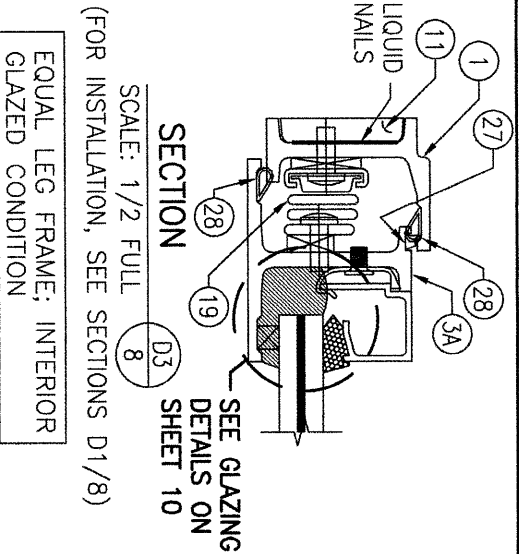


SECTION
SCALE: 1/2 FULL
D1
EQUAL LEG FRAME; EXTERIOR
GLAZED CONDITION

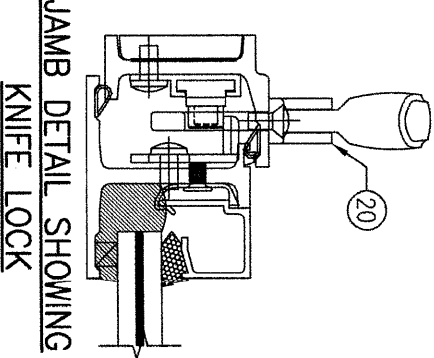
3/8" MAX. RIGID VINYL SHIM
AT EA. ANCHOR
(MIN. 1 1/8" X 2 1/2")



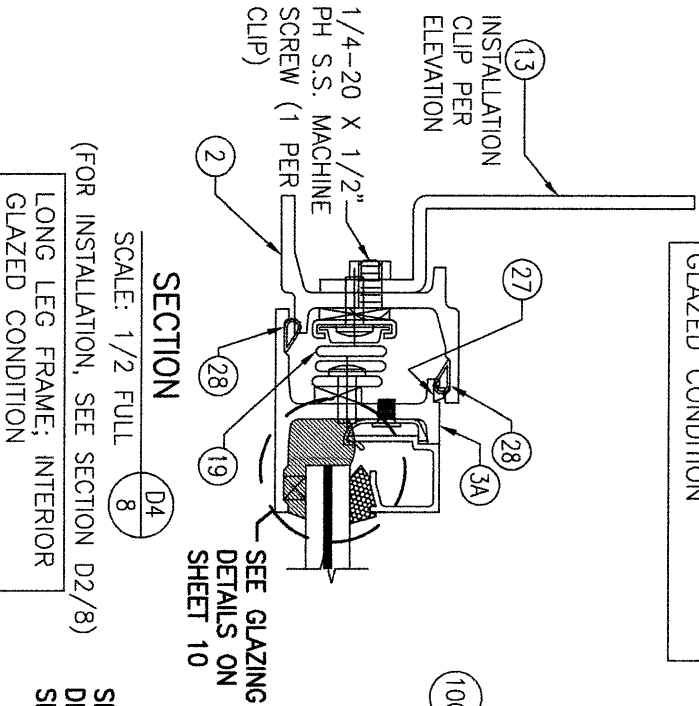
SECTION
SCALE: 1/2 FULL
D2
LONG LEG FRAME; EXTERIOR
GLAZED CONDITION



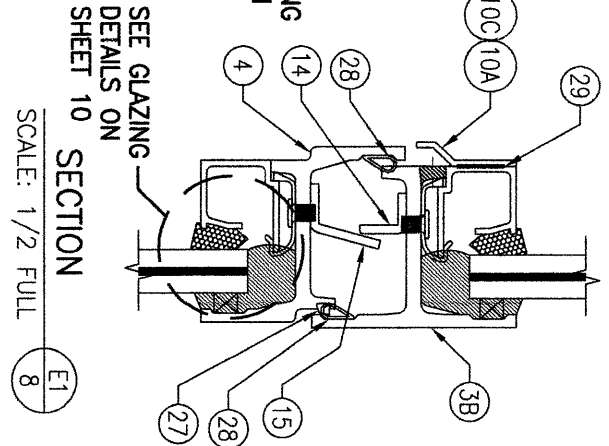
SECTION
SCALE: 1/2 FULL
D3
EQUAL LEG FRAME; INTERIOR
GLAZED CONDITION



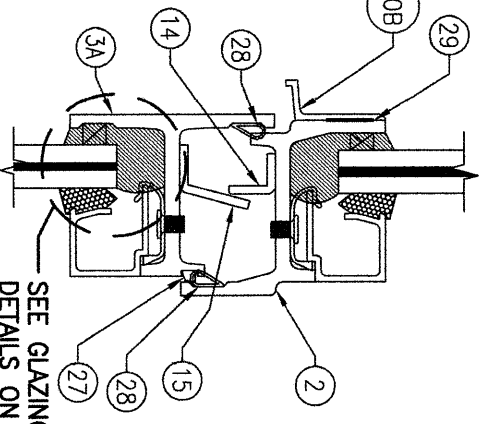
JAMB DETAIL SHOWING
KNIFE LOCK



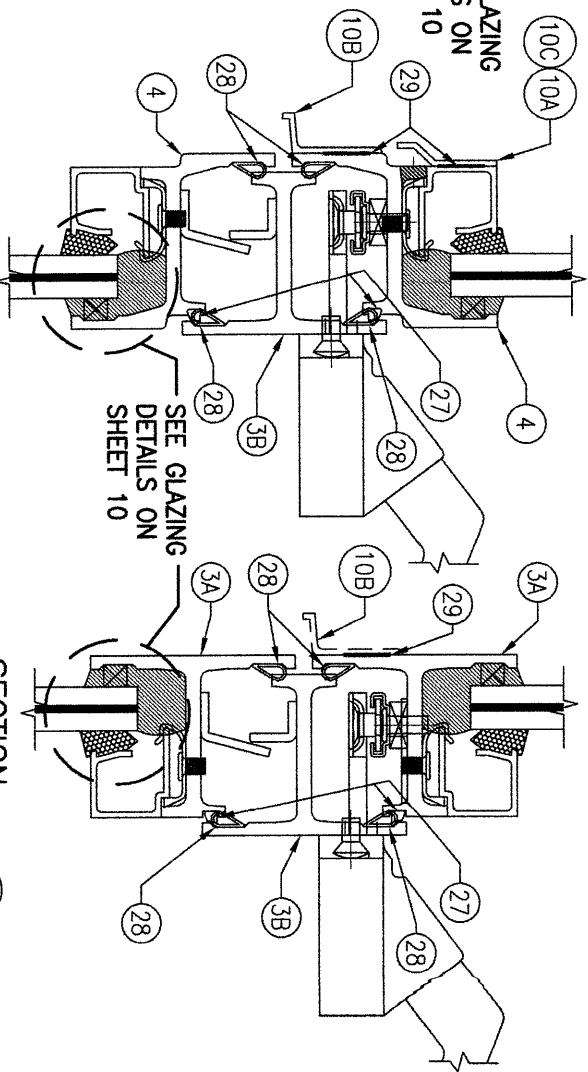
SECTION
SCALE: 1/2 FULL
D4
LONG LEG FRAME; INTERIOR
GLAZED CONDITION



SECTION
SCALE: 1/2 FULL
E1
EXTERIOR GLAZED

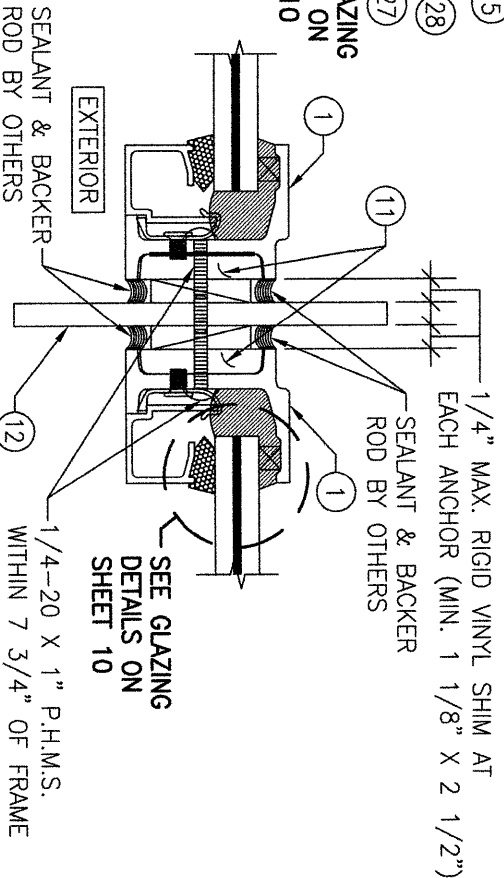


SECTION
SCALE: 1/2 FULL
E2
INTERIOR GLAZED



SECTION
SCALE: 1/2 FULL
F1
EXTERIOR GLAZED

SECTION
SCALE: 1/2 FULL
F2
INTERIOR GLAZED

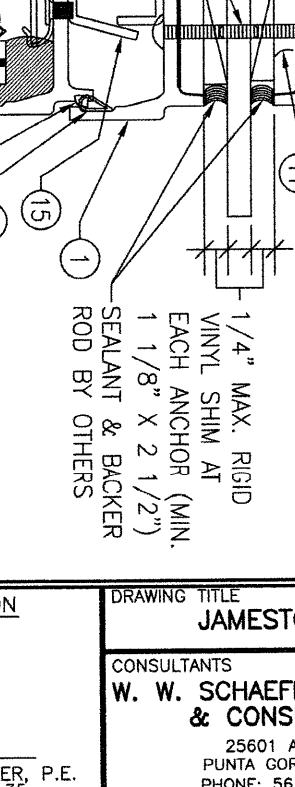
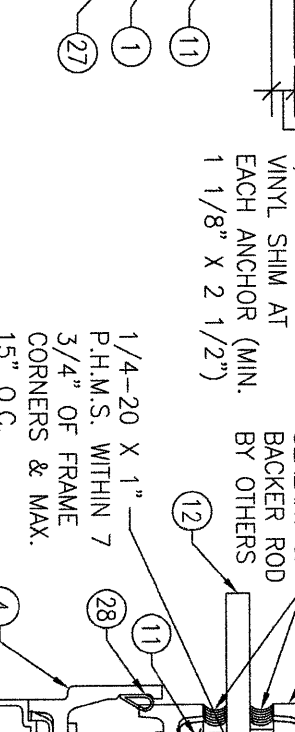
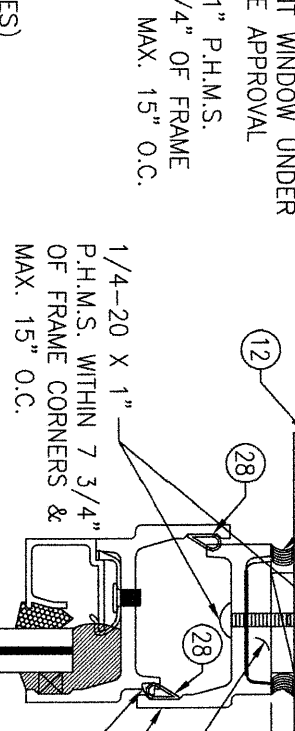
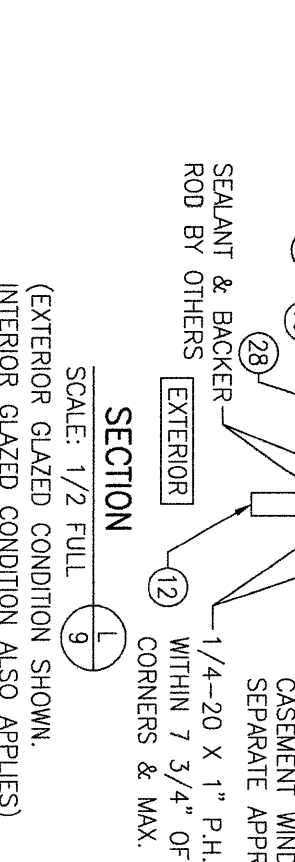
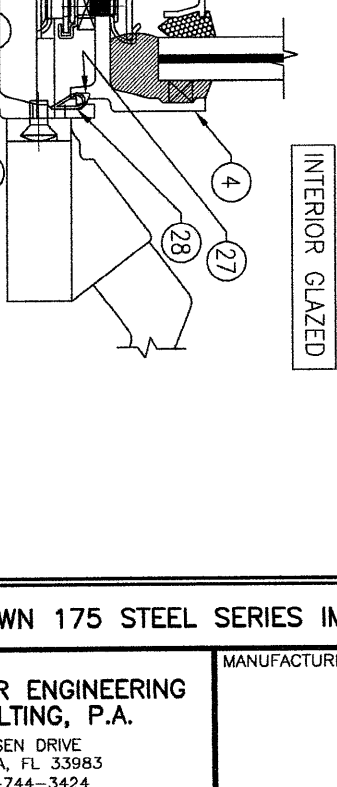
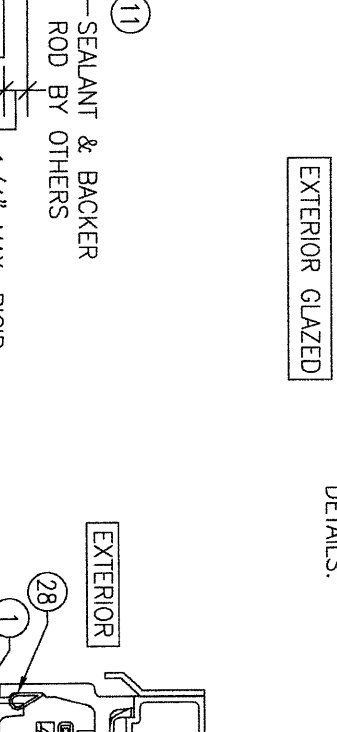
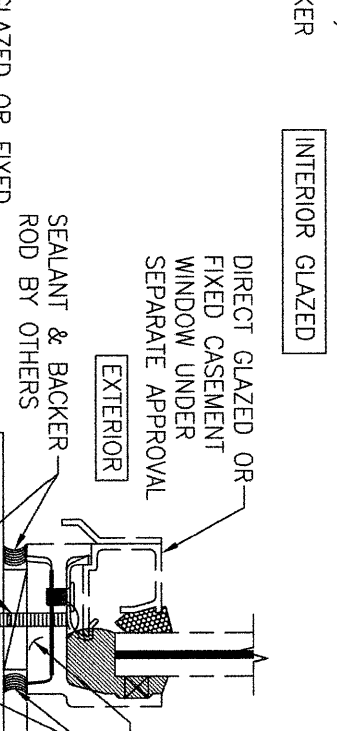
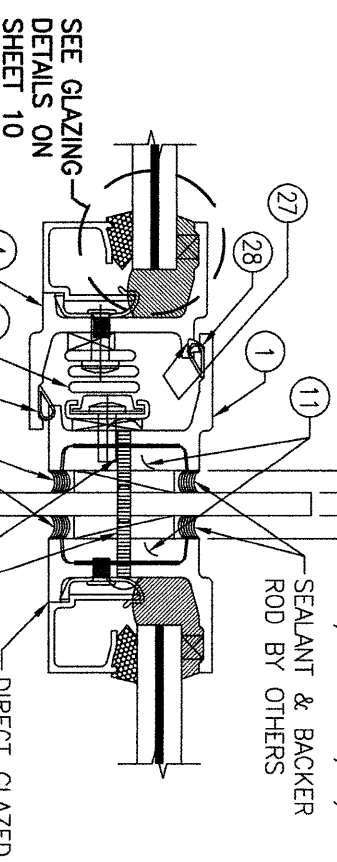
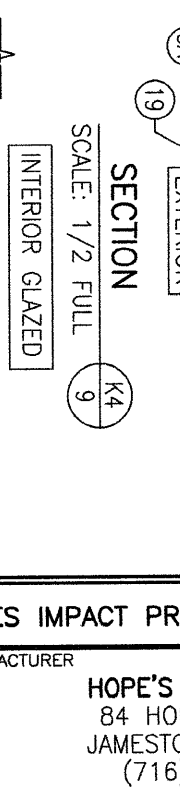
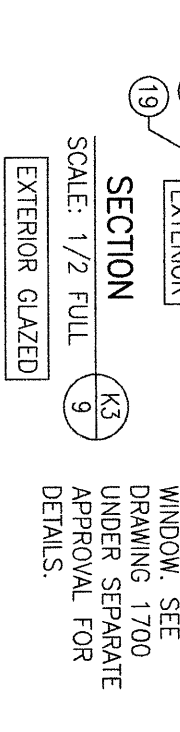
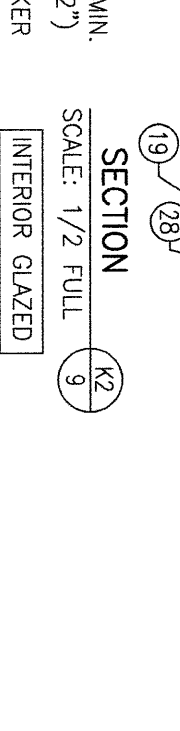
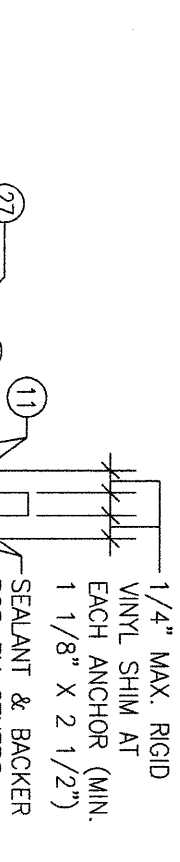
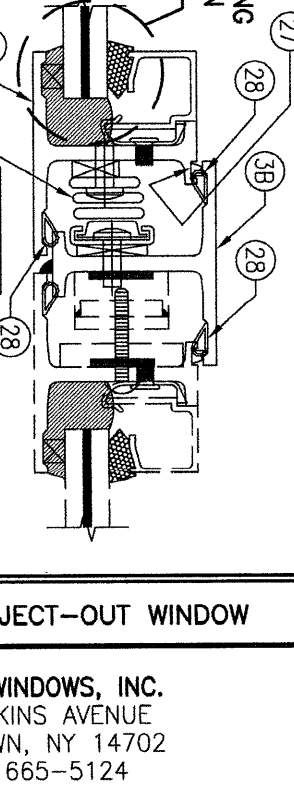
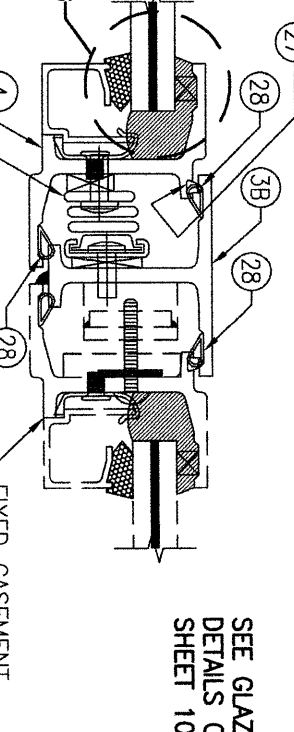
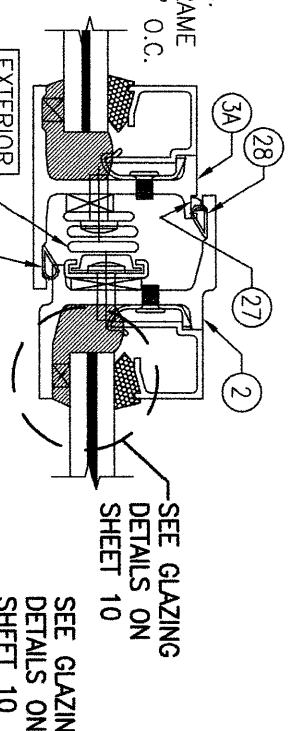
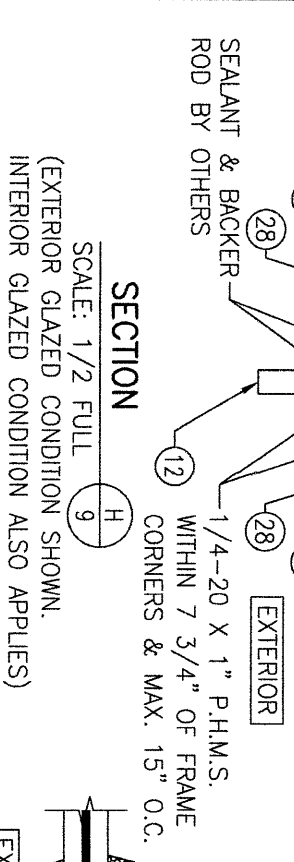
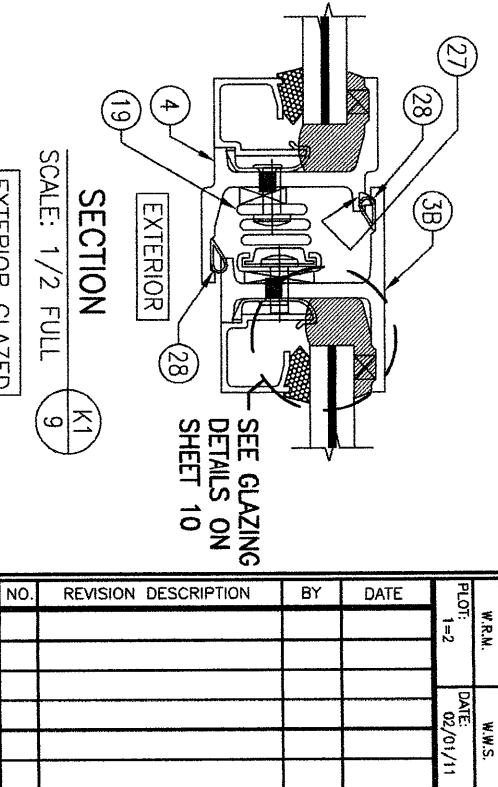
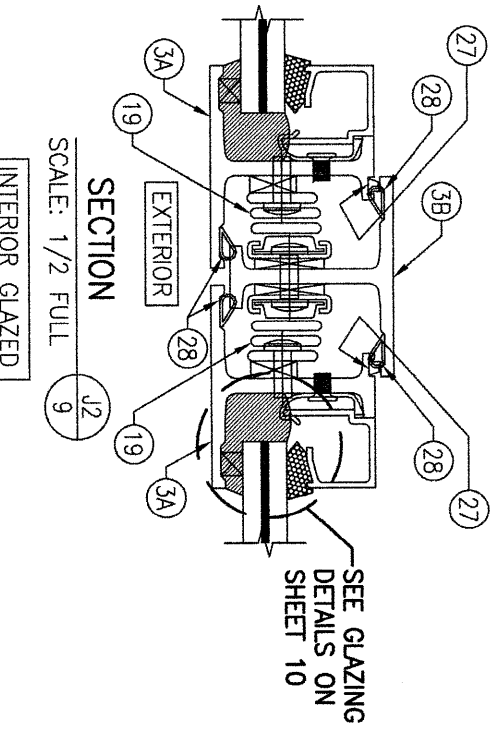
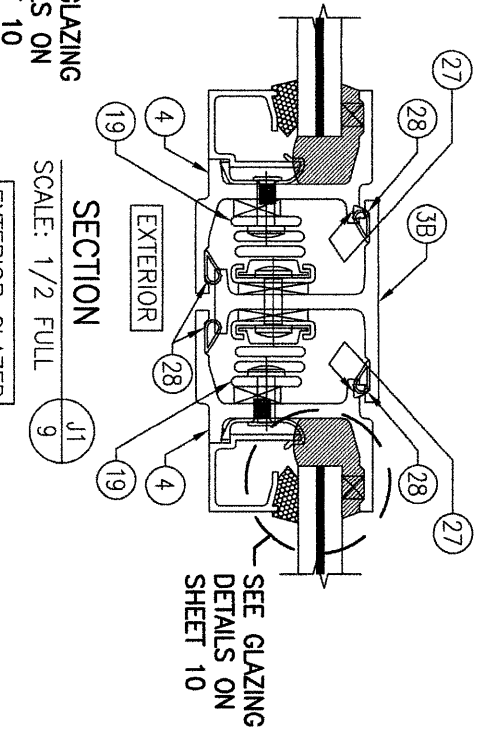
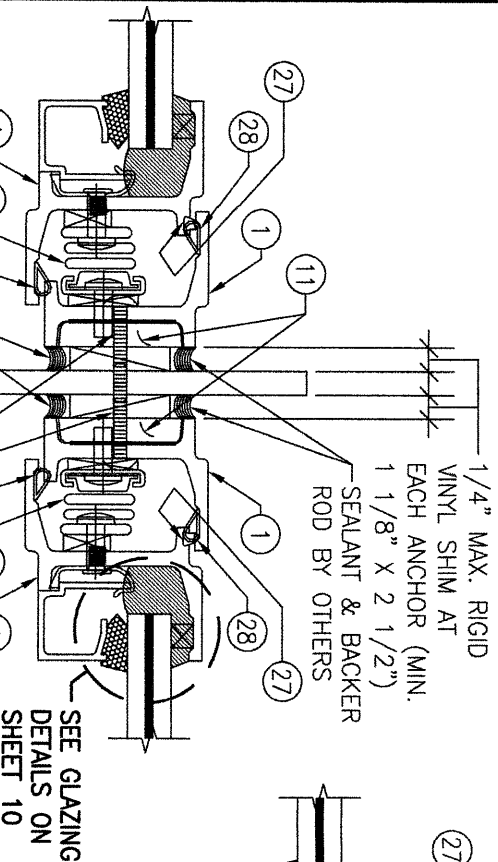


SECTION
SCALE: 1/2 FULL
G
EXTERIOR GLAZED CONDITION SHOWN.
INTERIOR GLAZED CONDITION ALSO APPLIES

NO.	REVISION	DESCRIPTION	BY	DATE
1	2			

DRAWING TITLE		CONSULTANTS		MANUFACTURER	
JAMESTOWN 175 STEEL SERIES IMPACT PROJECT-OUT WINDOW		W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.		HOPE'S WINDOWS, INC.	
		25601 AYSEN DRIVE PUNTA GORDA, FL 33983 PHONE: 561-744-3424		84 HOPKINS AVENUE JAMESTOWN, NY 14702 (716) 665-5124	

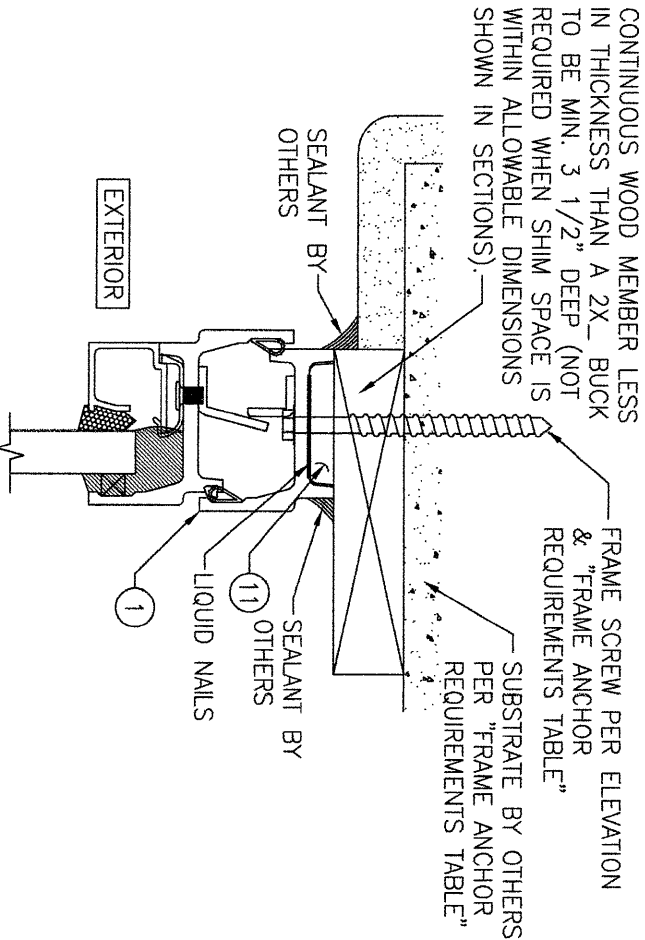
CERTIFICATION		DRAWING NO.		SHEET NO.	
WARREN W. SCHAEFER, P.E. P.E. NO. 44135		1738		8 OF 11	



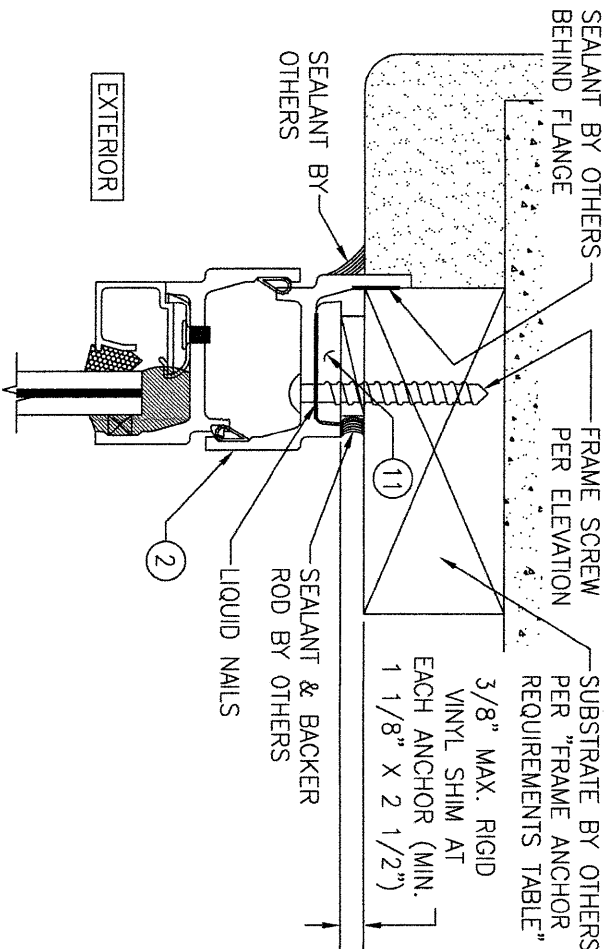
DRAWN BY:		CHECKED BY:	
W.R.M.		W.M.S.	
PLT:	1=2	DATE:	02/01/11
NO.	REVISION	DESCRIPTION	BY

DRAWING TITLE	
JAMESTOWN 175 STEEL SERIES IMPACT PROJECT-OUT WINDOW	
CONSULTANTS	MANUFACTURER
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.	HOPE'S WINDOWS, INC.
25601 AYSSEN DRIVE PUNTA GORDA, FL 33983 PHONE: 561-744-3424	84 HOPKINS AVENUE JAMESTOWN, NY 14702 (716) 665-5124

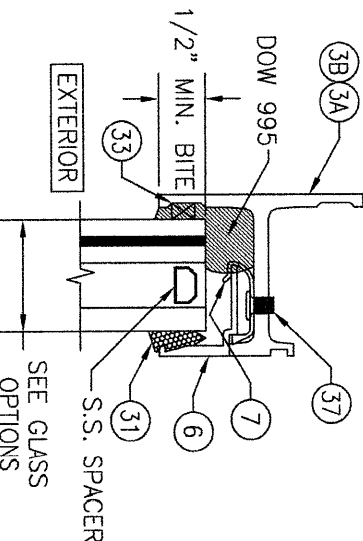
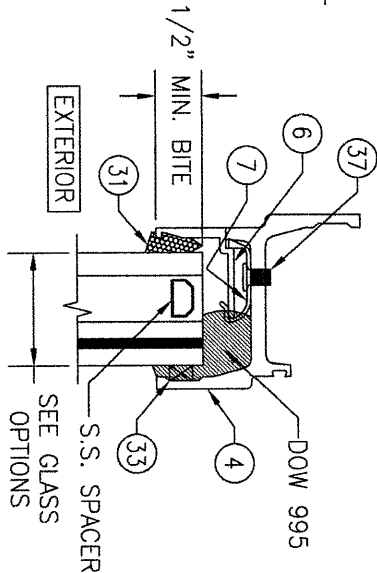
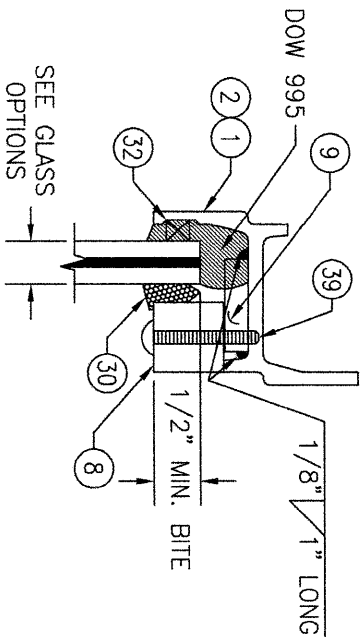
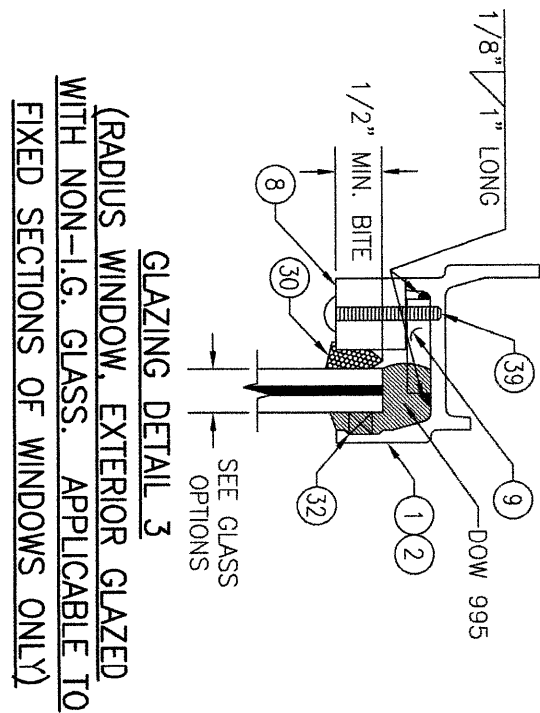
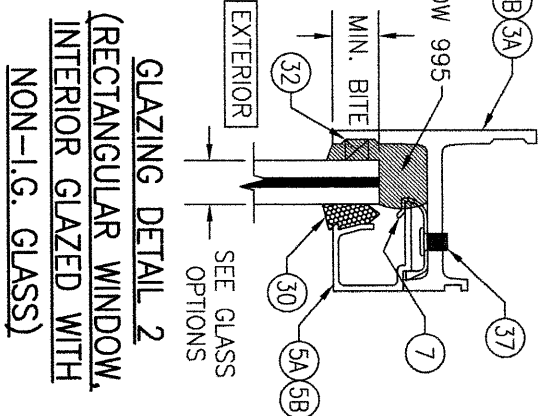
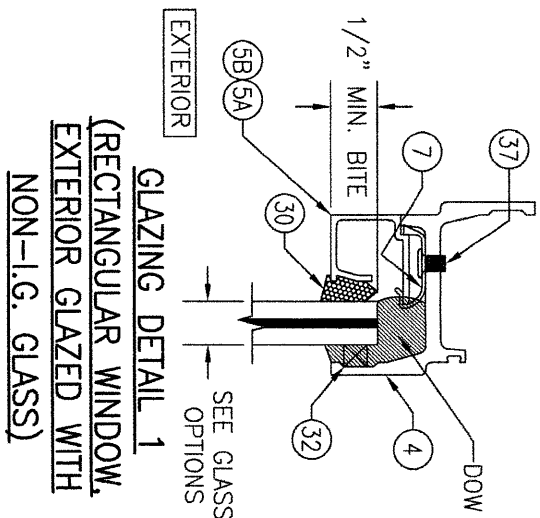
CERTIFICATION	
WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO.	REV.
1738	F
SHEET NO.	
9	OF 11



OPTIONAL DIRECT MOUNT DETAIL TO SUBSTRATE WITH SPACER
(PROJECT-OUT HEAD SECTION SHOWN; SILL & SIDES ARE INSTALLED THE SAME. FIXED WINDOW ALSO INSTALLED THE SAME)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



OPTIONAL FLANGE MOUNT DETAIL
(HEAD SECTION SHOWN; SIDES ARE INSTALLED THE SAME)
(EXTERIOR GLAZED CONDITION SHOWN. INTERIOR GLAZED CONDITION ALSO APPLIES.)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



GLAZING DETAIL 4
(RADIUS WINDOW, INTERIOR GLAZED WITH NON-I.G. GLASS. APPLICABLE TO FIXED SECTIONS OF WINDOWS ONLY)

GLAZING NOTE: AT BASE OF GLASS, 4" LONG SILICONE SETTING BLOCKS SHALL BE PLACED AT MAX. 24" O.C. (QTY. OF 2 MIN.). WIDTH & THICKNESS OF BLOCKS SHALL BE AS REQUIRED TO MATCH THE GLASS SECTION THICKNESS AND DEPTH OF SPACE AT GLASS EDGE.

GLASS OPTIONS

- OPTION 1 (NON-I.G. GLASS INTERIOR OR EXTERIOR GLAZED):
7/16" LAMINATED GLASS (3/16" H.S./0.09" KURARAY SG/3/16" H.S.)
- OPTION 2 (I.G. GLASS EXTERIOR GLAZED):
1 1/4" I.G. LAMINATED GLASS (1/4" TEMP. EXTERIOR, 1/2" ALUMINUM SPACER & 3/16" H.S./0.09" KURARAY SG/3/16" H.S. INTERIOR)
- OPTION 3 (I.G. GLASS INTERIOR GLAZED):
1 1/4" I.G. LAMINATED GLASS (3/16" H.S./0.09" KURARAY SG/3/16" H.S. EXTERIOR, 1/2" ALUMINUM SPACER & 1/4" TEMP. INTERIOR)
- NOTE: I.G. GLASS DOES NOT APPLY TO RADIUS UNITS.

CERTIFICATION

WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

DRAWING TITLE

JAMESTOWN 175 STEEL SERIES IMPACT PROJECT-OUT WINDOW

CONSULTANTS

W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.

25601 AYSEN DRIVE
PUNTA GORDA, FL 33983
PHONE: 561-744-3424

MANUFACTURER

HOPE'S WINDOWS, INC.
84 HOPKINS AVENUE
JAMESTOWN, NY 14702
(716) 665-5124

NO.	REVISION	DESCRIPTION	BY	DATE
1-2				

DRAWN BY: W.A.M. CHECKED BY: W.M.S.
DATE: 02/01/11

